



ISSN: 2321-8819 (Online) 2348-7186 (Print) Impact Factor: 1.498 Vol. 6, Issue 2, February, 2018

## The impact of business environment on performance of manufacturing SMEs in Palestine: The empirical evidence

Hashem Ismail Mohammad Ramadan<sup>1</sup> and Saari bin Ahmad<sup>2</sup>

<sup>1</sup>College of Business, University Utara Malaysia  
06010 UUM Sintok Kedeh Darul Aman, Malaysia  
[hashimramadan@yahoo.com](mailto:hashimramadan@yahoo.com)

<sup>2</sup>College of Business, University Utara Malaysia  
06010 UUM Sintok Kedeh Darul Aman, Malaysia  
[saari@uum.edu.my](mailto:saari@uum.edu.my)

**Abstract:** This study aimed to examine the prospective role played by environmental uncertainty on the performance of manufacturing SMEs. Interestingly, only a few empirical researches were conducted on the effect of business environment on Performance of SMEs in Palestine. The environmental uncertainty, and performance were measured on the basis of extensive literature.

The number of Questionnaire used to collect data from the respondents were 341. The respondents are from manufacturing SMEs in West Bank of Palestine. The findings indicate that there is a negative significance relationship between environmental uncertainty and the performance of manufacturing SMEs.

**Keywords:** environment uncertainty, Performance, small-and-medium enterprises (SMEs), Palestine, manufacturing sector.

### 1. Introduction

The SMEs firms maintain a high important place in the economic activities (Salisu, Abu Bakar, & Abdul Rani, 2017). Furthermore, the SMEs play important role in prompting GDP, the percentage contribution to Palestinian SMEs in GDP was approximately 24% in 2004 (Al hadwi & Albondok, 2006), while the annual report of Palestine Investment Fund (PIF) in 2014 say that the contribution of Palestinian SMEs in GDP is 55% (Palestine Investment Fund, 2014). In this regard, their contribution in some countries between 55% to more than 70% in GDP (Shah, Othman, & Mansor, 2016). SMEs also recycling national income, domestic investment motivation, reducing unemployment rates. It constitutes about 99% of Palestinian firms and employing 82% of all workers (Jalad *et al.*, 2010). In last Establishment Census 2012 in Palestine which made by Palestinian Central Bureau of Statistics (PCBS), show that there are 131,730 establishments of Palestine, 89,479 firms in West Bank and 42,251 establishments in Gaza Strip, the SMEs compose around 11% from the whole establishments in Palestine which equal 14,359 enterprises

All companies regardless of different forms (financial institution, small manufacturer, support provider, professional services, distributor, and countless others) needs to know the level of its performance (Dubihlela & Dhurup, 2015), with regard to this, SMEs are anticipated to upgrade their performance, especially in developing and emerging countries context (Amroune, 2016).

On the other hand, environmental uncertainty for a long time has been considered as an important variable to determine firms performance (Jauch & Kraft, 1986; Song, Augustine, & Yang, 2016). Different environment circumstances and various relationship with outside parties required varied types of organizational structural accommodation for achieving a high level of performance (Child, 1972).

### 2. Significance of Study

This study provides an overview and imperative contributions to the SMEs sectors in Palestine by investigating the relationship between, environmental uncertainty and performance of manufacturing SMEs in Palestine. Primary data were used to investigate the importance of manufacturing SMEs to the Palestinian economics and social life, to discover the SMEs assets, capital, geographical distribution, sectoral distribution, markets and financing sources.

The study provides great benefits for owner-managers, government policy makers, scholars, and educators by clarifying the concepts of environmental uncertainty and relationship with performance in the context of manufacturing SMEs in Palestine.

### 3. Literature Review

#### Environmental Uncertainty

Environments are considered as a complicated system of social, market, interrelated economic, technological and political variables. Under low environmental conditions, these variables can be



placed on a continuum ranging of uncertainty from low to high (Kattan, Pike, & Tayles, 2007).

Wang, Chen, & Chen (2012) found in their study that external environmental factors - which affect different organizations - is uncertain, complex, create problems with organizations and change rapidly. Any organization neglects the environmental factors will create difficulties for themselves. many researchers found that there is a link between performance and market orientation depend on organizational environment.

Perceived environmental uncertainty (PEU) vastly consider as a multidimensional construct, it explains how the managers understand the scope of unpredictable organization's environment. In china, they consider the uncertainty management as entrepreneur's essential function. So, to avoid competitive stagnation and management immobility they should ask for flexibility (Parnell, Long, & Lester, 2015).

Reducing environmental uncertainty lead to higher levels of company performance (Bendickson, Gur, & Taylor, 2016). Therefore, the environmental uncertainty has a negative affect on firms performance (Liu, 2017).

Correspondingly, Hartanto, Wahyudi, & PH (2017) argue in their study that the external environment has no impact on SMEs performance. As well as, S. S. Gaur, Vasudevan, & Gaur (2011) claims that there is limited role of environmental factors on company's performance. And based on the organizations competitive advantage and through the strategic management process attempt to develop and execute effective business strategies. As such, they would be able to position their organizations successfully in the marketplace as well as dealing with changes happen to their business environment (Hashim & Hashim, 2015).

### Performance of SMEs

Based on the review of the literature it observed that firm performance is the final outcome, which reflects the firm success in fulfilling its business goals (Shamimul, Hilman, & Gorondutse, 2017).

SMEs are anticipated to upgrade their performance, especially in developing and emerging countries context (Amroune, 2016). The outcome of executed strategies can be defined as business performance, Business performance is the main part in investigating organizational phenomena, while performance improvement stays in the middle of strategic management (Ho, Ahmad, & Ramayah, 2016).

It is admitted that dynamic, strong and efficient SMEs would play an essential role in assuring sustainable economic growth and generating competitive advantage. Likewise, as SMES is the key drivers of economic growth, and in order to improve performance and understand the ways to intensify competitiveness, this highlights the need to study the behavior of SMEs. It is significant for organizations operating in intense competitive environment to formulate effective strategies, which enable them to accomplish, chase and sustain the competitive advantage (Hussain, Ismail, & Akhtar, 2015).

Al-mahrouq (2010) in his study about Success Factors of Small and Medium-Sized Enterprises (SMEs) in Jordan found that there are five factors that have significant and positive impact on the success of the SMEs firms in Jordan, these factors are Financial structure, Technical procedures and technology, Human resources structure, Marketing and productivity and Structure of the firm.

The best sign to identify the success firm are profitability, which is considered in western companies as the common measure of performance. While, the financial profitability's common measurements are: return on sales (ROS), profit margin(PM), return on equity (ROE), return on assets(ROA). the Malaysian manufacturing firms preferred to determine the financial measurements the net profit, gross profit, sales and sales growth (Galbraith & Schendel, 1983; Hashim, 2015; Robinson, 1982).

Matanda, Ndubisi, & Jie (2016) use the firm performance as a dependent variable. The performance of SMEs can be measured as terms of financial performance, innovation, sales, human resources management (HRM) performance and market share. Correspondingly, the performance measurement of SMEs facing many difficulties because of data reliability problems, an unwillingness or inability, to provide the desired information and inadequate data availability. Measurement of performance can be done in absolute terms, in terms of changes from a past period or relative to competitors and may be based on either subjective or objective measures.

### 4. Study Framework

Based on the research literature review, this study explores the constructs in the context of performance of SMEs in Palestine. Figure 1 shows the Proposed framework of relationship between independent variable which are the environmental uncertainty, while the dependent variable is the performance.



Dubihlela & Dhurup (2015) divided the ingredient that forms the external environment are the market turbulence, technology changes, competition and the general economic conditions. While the Performance will be measured through return on asset, return on investment, return on sales and net profit.

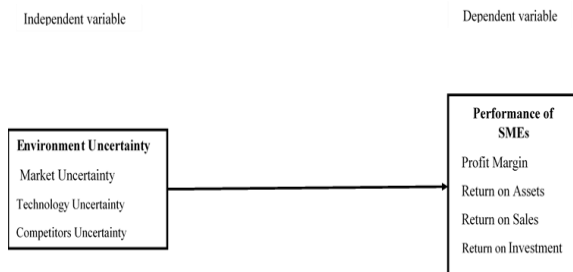


Figure 1. Research Framework

## 5. Research Methodology

The data were collected from owners-managers of SMEs in Palestine (West Bank). In this study, questionnaires were personally-administered, whereby the questionnaires were accompanied with a pen as a gift. Efforts were made to increase the response rate by reminding respondents through phone calls, SMS and personal visits (Sekaran & Bougie, 2009). Because of these efforts, 257 questionnaires were returned out of 341 questionnaires that are personally-administered to the respondents (owner-managers of SMEs) in Palestine. Consequently, this makes the response rate of 75.36%; however, out of the 259 responses obtained, only 252 questionnaires were used for further analysis (before removing four of outliers) making a valid response rate of 73.90% (Yehuda, 1999). This was due to the respondent did not answer the questionnaire accordingly. The response rate is comparable with other past studies (Ahmad, 2005; Aminu & Shariff, 2015; Didonet, Simmons, Díaz-Villavicencio, & Palmer, 2012; Dubihlela & Dhurup, 2015; Gaur et al., 2011).

After considering the research objectives and conceptual framework, this study developed the following hypothesis to analyze:

- H<sub>1</sub>) There is a negative relationship between Business Environment (BE) and Performance of SMEs (PS).

### Reliability Analysis

Cronbachs alpha coefficient was utilized in the present study along with composite reliability

values to examine the inter-item consistency of the measurement items. The Cronbachs alpha and composite reliability (CR) values should be higher than 0.70 (Hair, Ringle, & Sarstedt, 2011; Valérie, 2012). Table: 1 presents the values of Cronbachs alpha and CR of all constructs. It is evident that all exceeded the recommended value of 0.70. Hence, construct reliability was confirmed.

Table: 1

*Cronbach's Alpha and Composite Reliabilities of Constructs*

	Number of items	Cronbach's alpha	Composite Reliabilities
Env_Competitor	5	0.917	0.938
Env_Marketing	5	0.909	0.933
Env_Technology	5	0.893	0.922
Performance	5	0.905	0.928

## 6. Measurements

The variables of this study are environment uncertainty and performance. These main two variables of study were measured as follows:

### Environment uncertainty

This section of the questionnaire is aimed to assess the degree of environmental uncertainty, three separate scales of six items each used to assess various sides of environment uncertainty. (Adopted from Desarbo, Di Benedetto, Song, & Sinha, 2005; J. Parnell et al., 2015), First the *technological environment uncertainty* scale included the difficulty of technological forecasting, the extent of technical opportunity, the assessment of technological change, and other aspects of technology. The second is assessment of *the market environment uncertainty* was based on customer product needs, ease of forecasting marketplace changes, changes in customer preferences and customer price sensitivity changing customer base. The last one is *competitive environment uncertainty* scale assessed ability of firms to match competitive offers, the extent of promotion and price wars, and other competitive aspects. On all of these scales, a higher score means that the environment is more uncertain.

**Performance**

The performance of the industrial SMEs measured by using the percentage sales volume, the amount of assets, the amount of equity, the number of employees, return on investment (ROI), return on sales (ROS) and return on assets (ROA) over five-year period (Hashim, 2015).

The ROI, ROS and ROA measured as follows:

- a. ROI = net profit/total equity
- b. ROS = net profit/total sales
- c. ROA = net profit/total assets

The average performance measures were derived by adding the annual figures of (dollar sales volume, the amount of assets, the amount of equity, the number of employees, ROI, ROS and ROA) for over a three to five years period and divided by three or five.

The growth (average rate) performance measures were computed by taking the average percentage change in the Performance measures (sales volume, the amount of assets, the amount of equity, and the number of employees, ROI, ROS and ROA) for over a three to five year period (2012-2016).

The rate of change of each of the performance measures was computed by taking the difference between two years and was divided by the earlier year, resulting in each performance measure having three or four figures (i.e. 2012 and 2013; 2013 and 2014; 2014 and 2015; 2015 and 2016). Dividing the total growth rate from 2012 to 2016 by three or four derives the average rate of growth of each of the measures.

In addition, this study adopted the business performance composite index (BPCI) as the mean values of ROI, ROS and ROA (Hashim, 2015a, p. 127-128).

The BPCI was compute as:

$$BPCI = (ROI + ROS + ROA)/3$$

**7. Results**

Result revealed that the proposed relationship between business environment and performance

was highly negative significant ( $\beta = -0.457$ ,  $t = 8.761$ ) and hence the hypothesis was supported.

**8. Discussion**

In order to achieve the objective of this study regarding the relationship between environment uncertainty and performance of industrial SMEs in Palestine, the Result revealed that the proposed relationship between environment uncertainty and performance was highly negative significant ( $\beta = -0.457$ ,  $t = 8.761$ ) and hence the study hypothesis was supported.

The present finding seems to be consistent with C.-H. Liu (2017) who said that the environmental uncertainty has negative affect on performance, and with Bendickson et al. (2016) they argue that reducing environmental uncertainty lead to higher levels of company performance. In spite of that, Hartanto et al. (2017) they found that SMEs Performance does not affected by External Environment.

The relationship between performance and environmental uncertainty supported by literatures (Bendickson et al., 2016; Liu, 2017). A number of studies show a negative relationship between performance and environmental uncertainty. Thus, to increase performance, all firm's must reduce the environmental uncertainty or they should know more about their external environment in order to enhance their performance.

**9. Conclusion**

This study found that the firms managers and owners must know more about business environment to support their organizational performance, also they should have a better understand the impact of external environmental uncertainty on firm's performance, Furthermore, the findings show that theirs a negative significance relationship between the environment uncertainty and the performance of manufacturing SMEs in Palestine

**References:**

- Ahmad, S. (2005). Investigating the relationships between Distinctive Capabilities , Business Strategy and Performance of Malaysian Exporting SMEs. University of South Australia.
- Al-mahrouq, M. (2010). Success Factors of Small and Medium-Sized Enterprises (SMEs): The Case of Jordan. Anadolu University Journal of Social Sciences, 10(1), 1–17.
- Al hadwi, I., & Albondok, I. (2006). Small and medium enterprises in Palestine reality and future prospects. In The first national conference on the development of small and medium enterprises (pp. 1–96). Al-Bireh - Palestine: Institute for Community Partnership (ICP) - Bethlehem University.
- Aminu, I. M., & Shariff, M. N. M. (2015). Determinants of SMEs Performance in Nigeria: A Pilot Study. Mediterranean Journal of Social Sciences, 6(1), 156–164. <http://doi.org/10.5901/mjss.2015.v6n1p156>



- Amroune, B. (2016). Upgrade Programs for Small and Medium-Sized Enterprises “SMEs”, Performance Analysis: The Case of Algeria. *Journal of Marketing and Management*, 7(2), 17–46.
- Bendickson, J., Gur, F. A., & Taylor, E. C. (2016). Reducing environmental uncertainty: How high performance work systems moderate the resource dependence-firm performance relationship. *Canadian Journal of Administrative Sciences*. <http://doi.org/10.1002/cjas.1412>
- Child, J. (1972). *Organizational Structure, Environment and Performance: The Role of Strategic Choice*. Sociology (Vol. 6).
- Desarbo, W. S., Di Benedetto, C. A., Song, M., & Sinha, I. (2005). Revisiting the miles and snow strategic framework: Uncovering interrelationships between strategic types, capabilities, environmental uncertainty, and firm performance. *Strategic Management Journal*, 26(1), 47–74. <http://doi.org/10.1002/smj.431>
- Didonet, S., Simmons, G., Díaz-Villavicencio, G., & Palmer, M. (2012). The relationship between small business market orientation and environmental uncertainty. *Marketing Intelligence & Planning*, 30(7), 757–779. <http://doi.org/10.1108/02634501211273841>
- Dubihlela, J., & Dhurup, M. (2015). Determinants Of, And Barriers To, Market Orientation And The Relationship With Business Performance Among SMEs. *Journal of Applied Business Research*, 31(5), 1667–1678.
- Galbraith, C., & Schendel, D. (1983). An Empirical Analysis of Strategy Types. *Strategic Management Journal*, 4(June 1982), 153–173.
- Gaur, S. S., Vasudevan, H., & Gaur, A. S. (2011). Market orientation and manufacturing performance of Indian SMEs. *European Journal of Marketing*, 45(7/8), 1172–1193. <http://doi.org/10.1108/03090561111137660>
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *The Journal of Marketing Theory and Practice*, 19(2), 139–152. <http://doi.org/10.2753/MTP1069-6679190202>
- Hartanto, W., Wahyudi, S., & PH, J. S. (2017). Analysis the effect of entrepreneurial orientations and adaptation of external environment to SMEs performance with competitive advantages as intervening variables (study on SMEs fashion sector in semarang). Diponegoro University.
- Hashim, M. K. (2015). Adoption of Business Strategy and Performance of SMEs. In *Business Strategy in Malaysian Companies* (pp. 120–139).
- Hashim, M. K., & Hashim, A. J. (2015). Business Strategy and Performance of Takaful Firms. In *Business Strategy in Malaysian Companies* (pp. 86–102).
- Ho, T. C. F., Ahmad, N. H., & Ramayah, T. (2016). Competitive Capabilities and Business Performance among Manufacturing SMEs: Evidence from an Emerging Economy, Malaysia. *Journal of Asia-Pacific Business*, 17(1), 37–58. <http://doi.org/10.1080/10599231.2016.1129263>
- Hussain, J., Ismail, K., & Akhtar, C. (2015). Market Orientation and Organizational Performance : Case of Pakistani SMEs. *Arabian Journal of Business and Management Review*, 5(5). <http://doi.org/10.4172/2223-5833.1000139>
- Jalad, A., Sabella, A., Srouji, F., Melhem, F., Hantash, I., Abdeen, I., ... Haj Ali, S. (2010). MSMEs in Palestine ; Challenges and Potential. *Palestine Economic Policy Research Institute - MAS*. Ramallah-Palestine.
- Jauch, L. R., & Kraft, K. L. (1986). Strategic Management of Uncertainty. *The Academy of Management Review*, 11(4), 777. <http://doi.org/10.2307/258396>
- Kattan, F., Pike, R., & Tayles, M. (2007). Reliance on management accounting under environmental uncertainty. *Journal of Accounting & Organizational Change*, 3(3), 227–249. <http://doi.org/10.1108/18325910710820283>
- Liu, C.-H. (2017). The relationships among intellectual capital, social capital, and performance - The moderating role of business ties and environmental uncertainty. *Tourism Management*, 61, 553–561. <http://doi.org/10.1016/j.tourman.2017.03.017>





- Matanda, M. J., Ndubisi, N. O., & Jie, F. (2016). Effects of Relational Capabilities and Power Asymmetry on Innovativeness and Flexibility of Sub-Sahara Africa Small Exporting Firms. *Journal of Small Business Management*, 54(1), 118–138. <http://doi.org/10.1111/jsbm.12134>
- Palestine Investment Fund. (2014). Annual report. Palestine Investment Fund.
- Parnell, J. A., Long, Z., & Lester, D. (2015). Competitive strategy, capabilities and uncertainty in small and medium sized enterprises (SMEs) in China and the United States. *Management Decision*, 53(2), 402–431. <http://doi.org/10.1108/MD-04-2014-0222>
- Robinson, R. B. (1982). The Importance of “Outsiders” in Small Firm Strategic Planning. *Academy of Management*, 25(1), 80–93.
- Salisu, B., Abu Bakar, L., & Abdul Rani, S. H. (2017). The Influence of Strategic Capability on the Performance of Small and Medium Enterprise : A Pilot Study. *Asian Journal of Multidisciplinary Studies*, 5(11), 79–84.
- Sekaran, U., & Bougie, R. (2009). Research methods for business a skill building approach (5th ed.). John Wiley & Sons Ltd.
- Shah, M., Othman, A. R., & Mansor, M. N. (2016). Moderating Role of Environmental Turbulence on the Relationship between Innovative Practice, Mentoring, Social Capital and Small Business Performance. *Asian Journal of Multidisciplinary Studies*, 4(8), 202–219.
- Shamimul, A. M., Hilman, H., & Gorondutse, A. H. (2017). Performance Outcomes of Manufacturing Firms in Bangladesh. *Journal of Global Business and Social Entrepreneurship (GBSE)*, 1(4), 92–102.
- Song, L., Augustine, D., & Yang, J. Y. (2016). Environmental uncertainty, prospector strategy, and new venture performance: the moderating role of network capabilities. *International Entrepreneurship and Management Journal*, 12(4), 1103–1126. <http://doi.org/10.1007/s11365-016-0382-y>
- Valérie, J. (2012). (Re) discovering the PLS approach in management science. *M@ N@ Gement*, 15(1), 102–123.
- Wang, C., Chen, K., & Chen, S. (2012). Total quality management , market orientation and hotel performance : The moderating effects of external environmental factors. *International Journal of Hospitality Management*, 31(1), 119–129. <http://doi.org/10.1016/j.ijhm.2011.03.013>
- Yehuda, B. (1999). Response Rate in Academic Studies - A Comparative Analysis. *Human Relations*, 52(4), 421–438.